METHODS AND APPARATUS FOR MANAGING ACCESS TO DATA THROUGH A NETWORK DEVICE

ABSTRACT OF THE DISCLOSURE

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The invention is directed to techniques for managing access to data available from a data access device using a network switching protocol to manage content requests from clients. A data communications device receives a request for content from a client. The data communications device, such as a network switch, exchanges signals using the network switching protocol with one or more data access devices, such as a web cache. The data communications device can then select one data access device to provide the requested content to the client based, for example, on load balancing considerations. The data communications device sends a data transfer approval signal to the selected data access device. The selected data access device establishes a connection with the client using information, such as the client's network address, provided by the signals. The selected data access device then bypasses the data communications device and sends the requested content to the client. Using the network switching protocol, the data communications device can manage multiple, pipelined requests from the same client, while approving responses to the client from different data access devices, such as web caches and/or servers.